

**REMARKS/ARGUMENTS**

Claims 1-21, 23-29, 31, 32 and 34-37 are pending in this application. By this Amendment, claims 1, 10 and 24 are amended, claims 34-37 are added, and claim 33 is canceled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims, and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

**I. Allowable Subject Matter**

The Examiner is thanked for the indication that claim 6 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. New claim 37 is allowable claim 6 written in independent form. Accordingly, claim 37 should be in condition for allowance.

**II. Rejection(s) Under 35 U.S.C. §103(a)**

The Office Action rejects claims 10-19, 21, 23-29 and 31-33 under 35 U.S.C. §103(a) over U.S. Patent No. 5,925,273 to Sherrill. Claim 33 is canceled. Claim 19 depends from independent claim 1, and thus, for purposes of this reply, it is assumed that the Examiner intended to group claim 19 with the rejection under 35 U.S.C. §103(a) over Drews et al. in view of Sherrill discussed below. The rejection, insofar as it applies to the remaining claims, is respectfully traversed.

Independent claim 10 recites, *inter alia*, wherein the first coil array comprises a plurality of first coils alternately positioned in the upper and lower passages, and the second coil array

comprises a plurality of second coils alternately positioned in the upper and lower passages, and a span of the first coil array overlaps a span of the second coil array. Independent claim 24 recites, *inter alia*, wherein a span of the first coil array overlaps a span of the second coil array. Sherrill neither discloses nor suggests at least such features, or the respective claimed combinations of features.

Rather, Sherrill discloses a multistage heater assembly, including a first heater element 10a (which may be compared to the first coil array recited in independent claims 10 and 24) and a second heater element 10b (which may be compared to the second coil array recited in independent claims 10 and 24) mounted on a plate 14. The heater element 10a includes a series of electrically continuous coils (which may be compared to the plurality of first coils recited in independent claims 10 and 24) positioned in two parallel rows which face each other from opposite sides of the plate 14. Likewise, the heater element 10b includes a series of electrically continuous coils (which may be compared to the plurality of second coils recited in independent claims 10 and 24) positioned in two parallel rows which face each other from opposite sides of the plate 14.

More specifically, as shown in Figure 2 of Sherrill, the first heater element 10a is positioned at an air inlet A, and includes three coils positioned adjacent one another on an upper side of the plate 14, and three coils positioned adjacent one another on a lower side of the plate 14, opposite those on the upper side of the plate 14 such that incoming air passes across the coils of the first heater element 10a. The second heater element 10b is positioned down stream

Reply to Office Action of March 2, 2006

of the first heater element 10a, and the air which has been heated by the first element 10a passes across a series of three coils of the second heater element 10b positioned on either side of the plate 14 in a similar manner to those of the first heater element 10a. The first and second heater elements 10a and 10b are positioned sequentially in an axial airflow direction within the housing, and the individual coils of the respective heater elements 10a and 10b are in no way intermingled.

Thus, the three upper coils (those above the plate 14) of the first heater element 10a and the three upper coils (those above the plate 14) of the second heater element 10b are positioned sequentially along an airflow path through the heater. Likewise, the three lower coils (those below the plate 14) of the first heater element 10a and the three lower coils (those below the plate 14) of the second heater element 10b are also positioned sequentially along an airflow path through the heater not interrupted. The upper and lower coils of the first heater element 10a do not at any point overlap the upper and lower coils of the second heater element 10b. Thus, Sherrill neither discloses nor suggests independent first and second coil arrays in which a span of the first coil array overlaps a span of the second coil array, as recited in independent claims 10 and 24.

Further, it would not have been obvious to modify this sequential arrangement of the coils of the first and second heater elements 10a and 10b as disclosed by Sherrill. Such a rearrangement of the coils to in any way alternate, intermingle, or overlap the coils of the first and second heater elements 10a and 10b would require complete redesign of the plate 14,

mounting structure, and cross over portions 22a and 22b to retain independent control of the heater elements 10a and 10b, thus affecting the structural, mechanical, and electrical integrity of the design, while adding additional complexity and cost.

For at least these reasons, it is respectfully submitted that independent claims 10 and 24 are allowable over Sherrill, and thus the rejection of independent claims 10 and 24 under 35 U.S.C. §103(a) over Sherrill should be withdrawn. Dependent claims 11-18, 21, 23, 25-29, 31 and 32 are allowable at least for the reasons set forth above with respect to independent claims 10 and 24, from which they respectively depend, as well as for their added features.

The Office Action rejects claims 1-5, 7-9 and 20 under 35 U.S.C. §103(a) over U.S. Patent No. 4,700,495 to Drews et al. (hereinafter "Drews") in view of Sherrill. As indicated above, for the purposes of this reply, it is assumed that the Examiner intended to include claim 19, which depends from independent claim 1, with this grouping of claims. The rejection is respectfully traversed.

Independent claim 1 recites, *inter alia*, wherein the first coil array comprises a plurality of first coils alternately positioned in the upper and lower passages, the second coil array comprises a plurality of second coils alternately positioned in the upper and lower passages, and a span of the first coil array overlaps a span of the second coil array. As acknowledged by the Examiner in the remarks regarding independent claim 1, Drews neither discloses nor suggests at least such features. Further, as set forth above, Sherrill fails to overcome the deficiencies of Drews.

Accordingly, it is respectfully submitted that independent claim 1 is allowable over the applied combination, and thus the rejection of independent claim 1 under 35 U.S.C. §103(a) over Drews and Sherrill should be withdrawn. Dependent claims 2-5, 7-9 and 20, as well as claim 19, are allowable at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

### **III. New Claims 34-37**

New claims 34-37 are added to the application. It is respectfully submitted that new claims 34-37 meet the requirements of 35 U.S.C. §112. New claims 34-36 are allowable at least for the reasons set forth above with respect to independent claims 1, 10 and 24, from which they respectively depend, as well as for their added features. Further, new claim 37 is allowable claim 6 written in independent form, and thus claim 37 should be in condition for allowance.

### **IV. Conclusion**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, **JOANNA K. MASON**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

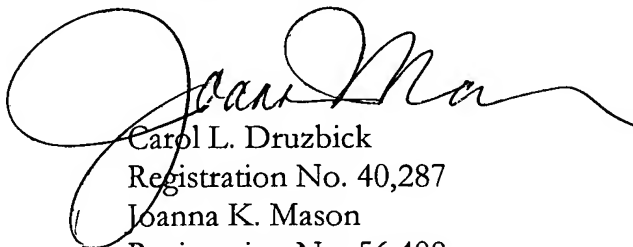
Serial No. **10/721,179**

Docket No. **K-0586**

Reply to Office Action of March 2, 2006

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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